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Negotiating FRAND Licenses in Good Faith

J. Gregory Sidak[*]

Government agencies in Japan, China, the European Union, the United States, and other countries have issued guidelines to facilitate private negotiation to license the use of standard-essential patents (SEPs) that a patent holder has voluntarily committed to a standard-setting organization (SSO) to offer to license on fair, reasonable, and nondiscriminatory (FRAND) terms to a third party seeking to implement the standard.[1] Although those guidelines differ in several respects, a common theme that emerges is the proposal that each counterparty negotiate a FRAND license in good faith.

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* Chairman, Criterion Economics, Washington, D.C. Email: jgsidak@criterioneconomics.com. I prepared this article for presentation at the conference Patents in Telecoms and the Internet of Things, organized by the Institute of Brand and Innovation Law at University College London and the Research Center for Advanced Science and Technology at the University of Tokyo and held in Tokyo on November 7–8, 2019, and the conference The Way Towards the Internet of Things: Open Standards vs Silos, organized by the European University Institute and held in Florence on November 15, 2019. I thank Henry Brooke, Adrian Howes, Sir Robin Jacob, Douglas Maggs, Pier Luigi Parcu, Urška Petrovčič, Thomas A. Smith, Blount Stewart, Andrew Vassallo, Xiuying Yu, and conference attendees in Tokyo and Florence for their helpful comments. I have served as a consulting or testifying economic expert in disputes or negotiations concerning the licensing of SEPs on FRAND or RAND terms. Portions of this article might reiterate themes that I have expressed in nonconfidential passages of expert reports and testimony in those matters; however, I do not rely on any confidential business information (CBI) from any proceeding. No client or third party has commissioned or funded or exercised editorial control over this article. The views expressed here are solely my own.

[1] *See, e.g.*, Guanyu Shenli Biaozhun Biyao Zhuanli Jiufen Anjian De Gongzuo Zhiyin (Shixing) (关于审理标准必要专利纠纷案件的工作指引 (试行)) [Working Guidelines on the Trial of Standard-Essential Patent Dispute Cases (for Trial Implementation)] (Apr. 26, 2018); Japan Patent Office, Guide to Licensing Negotiations Involving Standard Essential Patents (June 5, 2018), https://www.jpo.go.jp/e/support/general/sep_portal/document/index/guide-seps-en.pdf; Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee, COM (2017) 712 final, at 2 (Nov. 29, 2017) ("The Commission . . . considers that there is an urgent need to set out key principles that foster a balanced, smooth and predictable framework for SEPs."); Andrei Iancu, Under Secretary of Commerce for Intellectual Property and Director of the U.S. Patent and Trademark Office, Remarks Delivered at the Standard-Essential Patents Strategy Conference, Solvay Business School, Université Libre de Bruxelles (ULB) (Sept. 10, 2019), https://www.uspto.gov/about-us/news-updates/remarks-director-iancu-standard-essential-patents-strategy-conference ("Government policy should make clear that good faith negotiations are expected on both sides, and that the presence or absence of good faith during negotiations can be a factor in the setting of remedies for infringement of FRAND-encumbered SEPs.").

Judicial opinions in SEP cases also refer to the duty to negotiate a FRAND license in good faith, but judges so far have failed to explain that duty's precise origin or its metes and bounds. For example, in *TCL v. Ericsson*, Judge James Selna of the U.S. District Court for the Central District of California quoted the relevant part of the FRAND commitment established by the European Telecommunications Standards Institute (ETSI), but he never determined the precise obligations that this contract imposed on the SEP holder, much less any obligation that ETSI imposed on the implementer as an implicit condition of its being empowered to enforce that FRAND contract as that contract's intended third-party beneficiary.[2] And the agencies issuing guidelines have conspicuously neglected to define good-faith negotiation, let alone determine the steps that each party must take (and how quickly each must act) before a court may declare the negotiation to be at an impasse, such that contract formation has failed and the SEP holder may enforce its remedies against the unlicensed implementer as provided in the national law of the jurisdiction that issued the patents in suit.[3]

My goal in this article is to invite others to join an overdue conversation. I seek to do so by making two points regarding a duty to negotiate in good faith. Those two points will eventually require greater examination than I can possibly deliver in these few pages.

My first point is that mechanism design—a field of study within economics and game theory—can add rigor to the policy prescriptions and nebulous statements of government agencies about good-faith negotiation. For the SEP holders and implementers that have experienced protracted litigation over the licensing of SEPs for smartphones, it is possible to draw lessons from what economists managed to fashion from whole cloth two decades ago to create the functioning market for the public auctioning and subsequent

[2] TCL Commc'n Tech. Holdings, Ltd. v. Telefonaktiebolaget LM Ericsson, Nos. SACV 14-341 JVS, CV 15-2370 JVS, 2018 WL 4488286, at *6 (C.D. Cal. Sept. 14, 2018) (Selna, J.). For my own extended discussion of the SEP holder's and the implementer's possible duties to negotiate a FRAND license in good faith, see J. Gregory Sidak, *Judge Selna's Errors in* TCL v. Ericsson *Concerning Apportionment, Nondiscrimination, and Royalties Under the FRAND Contract*, 4 Criterion J. on Innovation 101, 102–07 (2019).

[3] Adverse parties in SEP litigation of course do sometimes stipulate that ETSI's FRAND obligation requires both the SEP holder and the implementer to negotiate in good faith. *See, e.g.*, Apple Inc. v. Samsung Elecs. Co., No. 11-cv-01846, 2012 WL 1672493, at *12 (N.D. Cal. May 14, 2012) (Koh, J.) (order granting in part and denying in part motion to dismiss amended counterclaims) ("[B]oth parties agree that Samsung's contractual obligation arising from its FRAND declarations to ETSI at the very least created a duty to negotiate in good faith with Apple regarding FRAND terms."). But a stipulation to that effect obviously does not prove that the FRAND contract by its own force imposes a duty of good-faith negotiation on both the SEP holder and the implementer. Nor does it prove that the existing contract jurisprudence of the jurisdiction in question imposes such a duty on both parties. And, when companies as legally sophisticated as Apple and Samsung find it mutually advantageous to stipulate to this proposition, their agreement may be reasonably taken to imply that either (1) it is painfully obvious that such a mutual duty of good-faith negotiation must implicitly arise under ETSI's FRAND contract for the whole machinery of an SSO to function as intended, or (2) it would be painfully expensive and commercially foolhardy to try to prove or disprove this question of contract interpretation with the degree of certitude that would be necessary to persuade a judge.

transferability of licenses to 3G spectrum. Without the groundwork laid by those economists, the smartphone today, if it existed at all, would be little more than an expensive pocket camera or portable media player searching for a Wi-Fi signal.[4]

My second point is that courts and policy makers possibly have failed to recognize the inadequate design of the current mechanism for FRAND licensing negotiations because that foundational economic question has become intertwined with, if not obscured by, the question of which jurisdiction's law controls a court's interpretation of the FRAND contract. My explanation will no doubt sound chauvinistic to some audiences in Europe or Asia, for which I apologize in advance to anyone taking offense. Simply put, as I explained in my 2018 article *The FRAND Contract*, the existing body of American contract law concerning offer, acceptance, and contract formation is concise and relatively unambiguous, and thus it provides a turnkey legal framework for resolving FRAND licensing disputes.[5] In a word, the American jurisprudence on contract formation is efficient. No further guidelines are necessary to apply that jurisprudence productively to interpreting the rights and duties surrounding negotiations for the licensing of SEPs. The wheel needs no reinventing.

Upon reading my article in 2018, Sir Robin Jacob, formerly of the Court of Appeal of England and Wales, reacted in private correspondence with a degree of consternation and skepticism exceeded only by the patience and tact found in the experienced jurist: my take on negotiation and contract formation in SEP licensing was very—what is the word?—*American*. At first I took Sir Robin's reaction as confirmation that the United States and Britain remain "two nations divided by a common language."[6] But I soon realized

[4] The economists who made major contributions to the design of those spectrum auctions include Paul Milgrom of Stanford, Paul Klemperer of Oxford, and Ken Binmore of University College London. *See* Paul Milgrom, Putting Auction Theory to Work (Cambridge Univ. Press 2004) (2001); Paul Klemperer, Auctions: Theory and Practice (Princeton Univ. Press 2004); Ken Binmore & Paul Klemperer, *The Biggest Auction Ever: The Sale of the British 3G Telecom Licenses*, 112 Econ. J. C74 (2002); Paul Milgrom, *Putting Auction Theory to Work: The Simultaneous Ascending Auction*, 108 J. Pol. Econ. 245 (2000).

[5] J. Gregory Sidak, *The FRAND Contract*, 3 Criterion J. on Innovation 1 (2018). In at least two reported cases, a RAND commitment was found to be unenforceable, thus mooting the question of contract interpretation. In two investigations before the U.S. International Trade Commission (ITC), Chief Administrative Law Judge Charles Bullock, in the public versions of two of his Initial Determinations on Violation of Section 337 and Recommended Determinations on Remedy and Bond, found that, on the basis of the specific facts of the case, and pursuant to New York law, the complainant's RAND commitment to the Joint Electron Devices Engineering Council (JEDEC) was too ambiguous to constitute an enforceable contract. Certain Memory Modules and Components Thereof, and Products Containing Same, Inv. No. 337-TA-1023, slip op. at 195 (USITC Nov. 14, 2017) (Initial Determination—Public Version); Certain Memory Modules and Components Thereof, Inv. No. 337-TA-1089, slip op. at 176 (USITC Oct. 21, 2019) (Initial Determination—Public Version); *see also* Sidak, *The FRAND Contract*, *supra*, at 2–6.

[6] Some attribute the quote to Oscar Wilde or George Bernard Shaw, but I attribute it to Winston Churchill. For Americans at least, this linguistic division between American English and British English has long been more than the stuff of word play among the chattering classes. *See, e.g.*, David Crystal, The Cambridge Encyclopedia of the English Language 80 (Cambridge Univ. Press 1980) ("Noah

that his point was truly legal, and not a linguistic one about how lawyers on two sides of the Atlantic might express the same concept with different words in British English than American English.

In private correspondence in 2019, Sir Robin has confirmed that his point was that, when faced with a case involving a contract governed by some foreign law, English law applies the law of the contract—for only in that way can the court enforce the bargain made between the parties. When Sir Robin said in 2018 that my position on the formation of a FRAND contract seemed a bit American, he meant that many Americans seem to find it difficult to understand that there are other countries and other laws! In 2019, Sir Robin makes clear that the important point is that, once an English court recognizes that foreign law controls, English law completely drops out of the picture (unless the foreign law is contrary to English public policy). In contrast, Sir Robin observes, the Americans seem to think that American law somehow is still involved a bit.

I believe that Sir Robin and I are now on the same page. But the process of my getting there produced a fortuitous insight that causes me to praise American contract law for a different reason. Suppose that Sir Robin and I were to stipulate that I had accurately described what an American court would do in a case controlled by the contract law of an American state. My analysis still would not accurately predict what a European court would do if presented with identical facts and required to make findings on offer, acceptance, and good-faith negotiation using, as the controlling authority, the contract law of a given European nation. The reason, I have since concluded, must be that the substantive law on certain fundamental questions of contract formation materially differs across nations, even nations that have had close commercial relations for centuries. Who knew?

Perhaps because I have lived my entire life an ocean away from Europe and Asia, this possibility surprised me. It was certainly nothing I was ever taught in law school; but, of course, American legal education in the 1970s did not require any study of foreign law, except to the extent that the occasional hoary decision from the English common law, like *Hadley v. Baxendale*,[7] was used to illustrate the origins of a particular doctrine long since incorporated into American jurisprudence. So, I asked an old friend who has been a contracts professor for three decades at an American university whether it is commonly understood, and consequently taught today to American law students as a matter of course, that the American law on contract formation

Webster's *Dissertations on the English Language* (1789) . . . proposed the institution of an 'American standard'. It was [in Webster's words] partly a matter of honour 'as an independent nation . . . to have a system of our own, in language as well as government' . . . and . . . partly a matter of practicality, England being at 'too great a distance to be our model'.").

7 156 Eng. Rep. 145 (Ex. Ch. 1854) (Eng.).

might substantively differ from the law of France or Japan or China. No on both scores, he replied.

Building on the English common law tradition, but insulated from Europe by an ocean, American contract law appears to have evolved in its own distinctly didactic manner, which I attribute to the long shadow cast by Oliver Wendell Holmes[8] and his intellectual heir in American jurisprudence, Richard Posner.[9] With respect to the principles of contract formation, that American demand for crisp answers implicitly conduces to what economists call "activity rules" and "closing rules," which simplify the task of definitively confirming whether a meeting of the minds has or has not occurred (much in the spirit, as I shall explain in the following pages, of economists realizing that national governments needed to define unambiguous activity rules and closing rules if they were to succeed in creating a workable market mechanism to auction licenses for 3G spectrum). By default, American law provides a clear closing rule for determining when contract formation has failed. The SEP holder makes an offer that is legitimately FRAND. Either the offer is accepted, or it is rejected explicitly or by counteroffer or by the passage of a commercially reasonable period of time. The licensee is not permitted to initiate rounds of offer and counteroffer. Following the licensee's failure to accept a legitimately FRAND offer, negotiations of course may continue between the parties, but no longer under the FRAND framework. Instead, those negotiations revert to the framework of public patent law.

In contrast to this American veneration of transactional efficiency (and a concomitant abhorrence of ambiguity or euphemism), the bodies of contract law of other jurisdictions (in Europe and the rest of the world) evidently do not offer, and do not aspire to offer, such black-and-white rules on whether and when a contract has been formed.[10] For example, when and for whom does the duty of good-faith negotiation commence, and how long does it remain in effect once an offer has been made? Some scholars of French law impute to the duty to negotiate in good faith an explicitly non-economic

[8] *See* Oliver Wendell Holmes, Jr., The Common Law (Little, Brown, & Co. 1881).

[9] *See* Richard A. Posner, Economic Analysis of Law (Wolters Kluwer 9th ed. 2014). As a new federal appellate judge, Posner relished every opportunity to cite an old common law case. Within four months of joining the Seventh Circuit, he found in a diversity case of first impression that *Hadley v. Baxendale* was the controlling authority for deciding a breach-of-contract claim involving a misdirected electronic funds transfer. EVRA Corp. v. Swiss Bank Corp., 673 F.2d 951, 955–59 (7th Cir. 1982).

[10] For example, a discussion on contract formation under French law that predates the 2016 revisions of the Civil Code states:

> French law sees a contract as an agreement, and it shares with English law (and indeed all other Western systems) the analysis of that agreement in terms of offer and acceptance. The practical

origin.[11] As one treatise on French law has observed, incompatible interpretations among scholars of the purpose and effect of the doctrine of good faith

> results of that analysis quite often, however, diverge from those found in English law, and where this is so it is usually because French law . . . adopts a more subjective approach.

Barry Nicholas, The French Law of Contract 61 (Oxford Univ. Press 2d ed. 1992). Elsewhere, Nicholas discusses—again, before the 2016 revisions of the French Civil Code—the difference between English and French contract law at a higher level of abstraction:

> It is clear . . . that the analysis of contract in terms of a free agreement of wills (or, in English terms, a meeting of minds) is common to both the French and the English classical theories of contract and remains part of the common currency of both systems.
>
> Where the two systems differ . . . is partly in the intellectual rigour with which the analysis is carried through to detailed consequences, and partly in the way that agreement is understood: as a subjective meeting of two minds or as the objective appearance of agreement. English law usually favours the latter approach, as being the more practical and the more conducive to the certainty which commercial convenience demands, whereas French law inclines to the former, though sometimes with a corrective which yields much the same practical result as the objective approach.

Id. at 35. I would argue, for the reasons that I explain in this article, that it is erroneous as an empirical matter to assume that "much the same practical result" will occur when contract formation for the licensing of SEPs is analyzed under a FRAND or RAND obligation controlled by French law than when American law (typically New York law) controls the interpretation of contract formation between the SEP holder and the implementer. For further analysis of offer and acceptance under French law before the 2016 revisions, see John Bell, Sophie Boyron & Simon Whittaker, Principles of French Law 302–05 (Oxford Univ. Press 2d ed. 2008). For analysis of contract formation under French law after the 2016 revisions, see Ruth Sefton-Green, *Formation of Contract: Negotiation and the Process of Agreement*, *in* The Code Napoléon Rewritten: French Contract Law After the 2016 Reforms 59 (John Cartwright & Simon Whittaker eds., Hart 2017).

[11] *See, e.g.*, Bell, Boyron & Whittaker, Principles of French Law, *supra* note 10, at 334 ("[S]ome [French] jurists consider that the principle of good faith is a useful way for French contract law to be or to become more 'social', . . . allowing the Cour de cassation to 'promote a degree of good citizenship in the relationship of parties to a contract, this being preferable to the cynicism which an exclusively economic understanding of contractual relations could bring'. However, other jurists warn against the potentially subjective and uncertain nature of the concept, or deny the vision of contracts as 'a little society where each party works for a common good' on the basis that . . . 'contracts often appear as the result of a tension between antagonistic interests, the striking of a balance between divergent interests'. So, 'the duty of good faith does not oblige a person to protect the interests of another person to the detriment of his own interest, as some of the partisans of the unlikely notion of "contractual solidarity" contend'.") (footnotes omitted) (first quoting Denis Mazeaud, *La Politique Contractuelle de la Cour de Cassation*, *in* Libre Propos sur les Sources du Droit, Mélanges en l'Honneur de Philippe Jestaz 371, 382 (Dalloz 2006); then quoting François Terré, Philippe Simler & Yves Lequette, Droit Civil: Les Obligations 443 (Dalloz 2005); and then quoting Philippe Malaurie, Laurent Aynès & Philippe Stoffel-Munck, Les Obligations 373 (Répertoire Defrénois 2007)); Nicholas, The French Law of Contract, *supra* note 10, at 48 ("[W]here the Common law, in the interests of commercial convenience and the security of transactions, looks to the external appearance of consent, French law, influenced no doubt by the doctrine of the autonomy of the will and more concerned for justice in the individual case than for commercial expediency, often takes account of the true state of mind of one of the parties. . . . [Thus,] the requirement of good faith, though explicitly mentioned by the Code [Napoléon] only in connection with the performance of contracts, is introduced into the context of their formation under cover of the requirement of a genuine consent."); Sefton-Green, *Formation of Contract: Negotiation and the Process of Agreement*, *supra* note 10, at 60 ("It could be said that good faith is a big empty envelope into which a lot of concrete circumstances can be folded."); Open Sessions Volume IV at 1111:9–18, Certain LTE- and 3G-Compliant Cellular Communications Devices, Inv. No. 337-TA-1138 (USITC Sept. 17, 2019) (McNamara, ALJ) (Testimony of Bertrand Fages) ("Q [by Counsel for INVT SPE LLC, the SEP holder and complainant]. Under French law, what does good faith require? A. Under French law it's ultimately up to the judge to decide what French law is in the context of each case; but in concrete terms, act in good faith is making serious proposals, which are consistent with the economic value and the purpose of the contract, and generally, to adopt an active attitude to achieve successful negotiations.").

indicate that "the notion of good faith and its use by the courts is likely to remain contested."[12] If SEP holders, implementers, and their attorneys fail to recognize that the monochrome character of American contract law differs from the Technicolor character of contract law in many other nations, they will expose themselves to an unmarked hazard in SEP licensing negotiations and SEP litigation whenever American contract principles do not control.

That hazard exists in very practical business terms because ETSI plays such a dominant role in the setting of wireless standards, and its FRAND commitment is of course controlled by French contract law[13]—which (like French wine) I understand in my admittedly limited experience to have a substantially more nuanced character than its American counterpart. In contrast, New York law controls the RAND contract of another prominent SSO, the Institute of Electrical and Electronics Engineers (IEEE).[14] It is quite possible that the differences between French contract law and New York contract law—to take only one example—will produce substantively different conclusions about the legal duties owed under the FRAND or RAND contract in question. Indeed, the scope of an SEP holder's obligations and the scope of the rights granted to third-party beneficiaries by virtue of a FRAND or RAND contract depend on both that contract's actual language and the controlling law governing the interpretation (if needed) of that contract. The key point is that, whenever American contract law does not apply, to know when the negotiation has failed to achieve contract formation, we need a closing rule.

This perspective on contract formation causes me to disfavor and avoid using the terminology of "holdup" and "holdout" to describe the presence or absence of good faith during the negotiation to license SEPs pursuant to the FRAND contract. I find it simpler and more germane to ask whether, and when, the offeror and the offeree have discharged whatever duties they bear under the FRAND contract between the SEP holder and the SSO. What is called "holdout" is a manifestation of the failure of the controlling law to declare in a timely manner that the contract negotiations have become futile, such that the SEP holder has discharged its contractual duty to the SSO (and to the implementer as the third-party beneficiary of the SEP holder's FRAND contract with the SSO). Calling the problem "holdout" supplies an

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12 Bell, Boyron & Whittaker, Principles of French Law, *supra* note 10, at 334.

13 *See, e.g.*, Memorandum Opinion and Order at 5, HTC Corp. v. Telefonaktiebolaget LM Ericsson, No. 6:18-CV-00243-JRG (E.D. Tex. Jan. 7, 2019) ("The FRAND commitment is set forth in the ETSI IPR policy, is 'governed by the laws of France,' and is 'solely [] contractual [in] nature.'") (alterations in original) (quoting European Telecommunications Standards Institute, ETSI Intellectual Property Rights Policy, Annex 6, § 12 (Apr. 3, 2019) [hereinafter ETSI IPR Policy], https://www.etsi.org/images/files/IPR/etsi-ipr-policy.pdf).

14 *See* The Institute of Electrical and Electronics Engineers [IEEE], IEEE-SA Standards Board Bylaws § 3, at 3 (Mar. 2019), https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/sb_bylaws.pdf.

epithet, but it does nothing to help answer the legal or economic question; to the contrary, that nomenclature is arguably counterproductive in the sense that it falsely suggests that the SEP holder must make some further evidentiary showing that "holdout" has occurred before it may pursue its legal remedies under the national law of the country that issued the patents in suit.

In the remainder of this article, I will ask a number of questions that I suspect currently lack clear answers. Does the duty to negotiate a FRAND license in good faith encompass the stages of negotiation that precede the SEP holder's presentation of an offer to the implementer to license the SEP in question? When does someone who bears a duty to negotiate the licensing of SEPs in good faith discharge that duty? In addition to analyzing some of the more quotidian components of good faith, such as the readiness of the counterparties to sit down and negotiate, I will examine the peculiar wording of ETSI's requirement that the SEP holder be "prepared to grant" a license to its SEPs, and I will propose an interpretation of that important phrase that is explicitly informed by the economic analysis of law. Given how controversial and how consequential these issues have been in the licensing of SEPs for smartphones, I see no reason why they will prove to be simpler to resolve in the licensing of SEPs for connected cars, smart homes, and the multitude of other 5G devices that will constitute the Internet of Things.

I. Why Differences Between American and French Principles of Contract Formation Have Economic Consequence in SEP Disputes

Parties in litigation over SEPs in the United States and in London routinely solicit the expert opinions of scholars on French contract law to assist the court's interpretation of an SEP holder's FRAND contract with ETSI. Yet, as I have remarked elsewhere, the public trial testimony, expert reports, and judicial decisions describing those expert opinions on French law cast doubt on the determinacy of French contract law.[15] An American observer might conclude that French contract law on its own is incapable of defining good faith, or at least that it is ill equipped to supply a definition. Principles defining good faith in the evidentiary records of these cases are simply not percolating through into the public domain to shed light on how parties should behave or how judges should judge. Economic insights from the field of mechanism design can cure that indeterminacy.

[15] *See* Sidak, *Judge Selna's Errors in* TCL v. Ericsson *Concerning Apportionment, Nondiscrimination, and Royalties Under the FRAND Contract*, *supra* note 2, at 104–07.

A. Is There a Duty to Negotiate in Good Faith?

No American court deciding a dispute over SEPs has publicly explained the origin in French law of the duty to negotiate in good faith. In particular, no American court has explained why the implementer—as ***the third-party beneficiary*** to the SEP holder's FRAND contract with ETSI, not a party to that contract—has a duty to negotiate in good faith.[16] Indeed, judges and commentators take as given that the duty to negotiate in good faith applies symmetrically to the third-party beneficiary before contract formation between the SEP holder and the third-party beneficiary of the SEP holder's FRAND contract with ETSI.[17] Every judicial opinion is a public good that can shed light on the law.[18] If the proposition is uncontroversial that a duty of good faith and fair dealing applies to the negotiation between an SEP holder and an implementer of an ETSI standard, then it would be helpful for judges to explain why and whence that duty arises.[19]

Reading ETSI's FRAND contract alongside the Civil Code of France, which specifies in Article 1104 that "[c]ontracts must be negotiated, formed and performed in good faith,"[20] could support at least the following four conclusions concerning the duty to negotiate in good faith. These conclusions are not to the exclusion of other conclusions that might follow from French law or the law of other nations.

First, to the extent that the FRAND contract between the SEP holder and ETSI is enforceable under French law, the SEP holder must perform the obligations that arise from that FRAND contract in good faith. That is, the SEP holder has an obligation to ETSI to act in good faith in its preparedness to grant a license to an implementer that qualifies as an intended third-party beneficiary. The same conclusion would likely apply under American contract

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16 *See id.* at 102–07.

17 In 2015, I observed:

> With respect to contract performance and enforcement, the Restatement [of Contracts] says that "[e]very contract imposes ***upon each party*** a duty of good faith and fair dealing . . . ." It is not clear why this symmetry of obligations should give way to asymmetry of obligations at the stage of contract formation, assuming that a court is inferring that the common law duty of good faith and fair dealing encompasses contractual negotiations.

J. Gregory Sidak, *The Meaning of FRAND, Part II: Injunctions*, 11 J. Competition L. & Econ. 201, 217 n.67 (2015) (quoting Restatement (Second) of Contracts § 205 (Am. Law Inst. 1981) (emphasis added)).

18 *See* Posner, Economic Analysis of Law, *supra* note 9, at 760–62.

19 *See* Sidak, *Judge Selna's Errors in* TCL v. Ericsson *Concerning Apportionment, Nondiscrimination, and Royalties Under the FRAND Contract*, *supra* note 2, at 107.

20 Code Civ. [Civ. Code] art. 1104 (Fr.), *translated in* John Cartwright, Bénédicte Fauvarque-Cosson & Simon Whittaker, The Law of Contract, The General Regime of Obligations, and Proof of Obligations art. 1104 (2016). "This provision is a matter of public policy." *Id*. This translation of the "provisions of the *Code civil* created by *Ordonnance* n° 2016-131 of 10 February 2016 . . . was commissioned by the *Direction des affaires civiles et du sceau, Ministère de la Justice, République française*." Cartwright, Fauvarque-Cosson & Whittaker, The Law of Contract, The General Regime of Obligations, and Proof of Obligations, *supra*, at 1.

law, because the SEP holder that is offering to license its SEPs to an implementer is performing its contractual obligations under the FRAND contract; and American contract law, which of course is state law and therefore might vary across the United States, generally provides that parties must perform their contractual duties in good faith.[21]

Second, to the extent that the implementer is itself an SEP holder that has entered into a FRAND contract with ETSI, the implementer also has a duty under French contract law to negotiate in good faith. Such a duty would typically arise when counterparties negotiate a cross license, wherein the implementer offers to license to the SEP holder its own SEPs that are subject to a FRAND commitment to ETSI. For example, in *HTC v. Ericsson*, Chief Judge Rodney Gilstrap of the Eastern District of Texas found that HTC, the implementer, had a duty to negotiate a cross-license in good faith because it was also an SEP holder that had entered into its own FRAND contract with ETSI.[22] (Again, American contract law would support a similar conclusion. An implementer that itself had executed a FRAND contract (because it is also an SEP holder) has a contractual duty to perform in good faith the obligations pursuant to its FRAND contract.[23])

Third, to the extent that the negotiation over SEPs between the SEP holder and the implementer culminates in the execution of a license agreement that is subject to the Civil Code of France (or to some equivalent law of a different nation that imposes a duty comparable to Article 1104), both the SEP holder and the implementer are obligated to negotiate their contract in good faith, because the Code explicitly directs parties to act in good faith when *negotiating* a contract.

Fourth, to the extent that the FRAND contract between the SEP holder and ETSI is properly characterized as *un accord de principe* (an agreement in principle), as a matter of French law, the *accord de principe* might impose the duty on both the SEP holder and the implementer to negotiate in good faith.[24]

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21 *See, e.g.*, Northwest, Inc. v. Ginsberg, 572 U.S. 273, 295 (2014) ("[M]ost States recognize some form of the good faith and fair dealing doctrine."); *see also* Sidak, *Judge Selna's Errors in* TCL v. Ericsson *Concerning Apportionment, Nondiscrimination, and Royalties Under the FRAND Contract*, *supra* note 2, at 105–06 & nn.23–27.

22 HTC Corp. v. Telefonaktiebolaget LM Ericsson, No. 6:18-CV-00243-JRG, 2018 WL 6617795, at *5–6 (E.D. Tex. Dec. 17, 2018).

23 It is worth questioning whether the negotiation of a license to SEPs declared essential to ETSI is beyond the scope of the *performance* of the SEP holder's FRAND contract with ETSI to be "prepared to grant," and thus outside the scope of ETSI's choice-of-law provision. I leave the task of answering this question to others more familiar with French law.

24 *See* Certain Wireless Devices with 3G Capabilities and Components Thereof, Inv. No. 337-TA-800, slip op. at 422 (USITC June 28, 2013) (Initial Determination—Public Version) (Shaw, ALJ) ("The parties agree that the ETSI IPR Policy is governed by French law. Under French law, the type of obligation set forth in the ETSI undertaking is best described as *un accord de principe* (agreement in principle). This imposes on both negotiating parties a duty to negotiate in good faith. It does not, however, impose an obligation actually to conclude a contract. . . . In this regard, French law is consistent with U.S. contract law, under which a generalized 'agreement to agree' is unenforceable, but parties may enter into binding agreements to negotiate.") (citations omitted); *see also* Open Sessions Volume IV at 1106:8–21, Certain

However, if the SEP holder and an implementer are not negotiating in the shadow of the Civil Code of France, and if that implementer has not entered into its own binding FRAND contract with ETSI, it is far from apparent what source of law or what equitable principle would force the implementer to negotiate in good faith. In particular, I am aware of no state in the United States whose contract law imposes a general duty to negotiate in good faith, as does Article 1104 of the Civil Code of France. As Judge Posner explained in 1991, the general contractual duty to negotiate before contract formation in good faith in the United States is so vanishingly small as to be virtually nonexistent.[25] In other words, under American contract law principles, an implementer has no duty to negotiate in good faith a license agreement for FRAND-committed SEPs. If the FRAND agreement does not create a

LTE- and 3G-Compliant Cellular Communications Devices, Inv. No. 337-TA-1138 (USITC Sept. 17, 2019) (McNamara, ALJ) (Testimony of Bertrand Fages) ("Q [by Counsel for INVT SPE LLC, the SEP holder and complainant]. What is an accord de principe, or agreement in principle under French law? A. An agreement in principle is characterized by the fact that it entails no obligation to contract, but only an obligation to negotiate in good faith; and this obligation to negotiate in good faith is only an obligation of means that permits behavior, consists of having an attitude in order to achieve successful negotiations by conducting them fairly, and we have a decision from the Paris Court of Appeal that puts it very clearly by saying that there is no obligation to conclude but only a commitment to negotiate."); Bell, Boyron & Whittaker, Principles of French Law, *supra* note 10, at 305 ("Sometimes parties to contractual negotiations make preliminary agreements before concluding any ultimate contract. French law's attitude to these is generally more favourable than is English law's owing in particular to the absence of the requirement of consideration . . . . A very important example of pre-contractual agreements which are enforced as contracts are 'unilateral promises to contract' (*promesses unilatérales de contrat*). Here, a person promises to contract on particular terms with another at the latter's option, this promise being binding once accepted. Of more uncertain status are 'agreements in principle' (*accords de principe*) which usually involve an agreement by the parties on certain matters and that they will continue to negotiate towards final contract. . . . Even in the absence of any preliminary agreement as to the course or conduct of negotiations, French law holds the parties to a standard of proper conduct, referred to either positively in terms of the requirements of good faith or negatively in terms of the parties having 'abused their right' to break off negotiations before a contract is concluded.") (footnotes omitted).

[25] *See, e.g.*, Market St. Assocs. Ltd. v. Frey, 941 F.2d 588, 593–94 (7th Cir. 1991) (Posner, J.) ("In fact the law contemplates that people frequently will take advantage of the ignorance of those with whom they contract, without thereby incurring liability. The duty of honesty, of good faith even expansively conceived, is not a duty of candor. You can make a binding contract to purchase something you know your seller undervalues.") (citations omitted); *id.* at 594 ("But it is one thing to say that you can exploit your superior knowledge of the market—for if you cannot, you will not be able to recoup the investment you made in obtaining that knowledge—or that you are not required to spend money bailing out a contract partner who has gotten into trouble. It is another thing to say that you can take deliberate advantage of an oversight by your contract partner concerning his rights under the contract. Such taking advantage is not the exploitation of superior knowledge or the avoidance of unbargained-for expense; it is sharp dealing. Like theft, it has no social product, and also like theft it induces costly defensive expenditures, in the form of overelaborate disclaimers or investigations into the trustworthiness of a prospective contract partner, just as the prospect of theft induces expenditures on locks."); *id.* at 595–96 ("The emphasis we are placing on postcontractual versus precontractual conduct helps explain the pattern that is observed when the duty of contractual good faith is considered in all its variety, encompassing not only good faith in the *performance* of a contract but also good faith in its *formation* and in its *enforcement*. The formation or negotiation stage is precontractual, and here the duty is minimized. It is greater not only at the performance but also at the enforcement stage, which is also postcontractual. . . . At the formation of the contract the parties are dealing in present realities; performance still lies in the future. As performance unfolds, circumstances change, often unforeseeably; the explicit terms of the contract become progressively less apt to the governance of the parties' relationship; and the role of implied conditions—and with it the scope and bite of the good-faith doctrine—grows.") (emphasis in original) (citations omitted).

contractual duty to negotiate a license in good faith, then it appears American contract law will not itself create such a duty.[26]

Despite not having a legal obligation to negotiate in good faith under American contract law principles, an implementer that fails to negotiate in good faith might nevertheless face legal consequences for such conduct. For example, a U.S. court might order the implementer to pay enhanced damages for willful infringement of SEPs.[27] Similarly, an implementer that fails to negotiate in good faith might forfeit its right, as an intended third-party beneficiary of a FRAND contract, to receive a FRAND offer. The implementer could also incur liability in tort law.[28] However, the implementer would face those legal consequences whether or not it has a preexisting duty to negotiate in good faith with the SEP holder.[29]

B. Why Does It Matter Whether a Duty Exists to Negotiate in Good Faith?

My purpose in this article is not to attempt to answer the preceding questions concerning choice-of-law principles and the source of the possible duty, borne by a third-party beneficiary of the SEP holder's FRAND contract with ETSI, to negotiate a license to the committed SEPs in good faith. Instead, I simply and briefly expose the ambiguity of French law concerning the certainty of whether and when contract formation has occurred in FRAND cases, as well as the substantive implications of that ambiguity.[30] And I now

[26] I do not attempt to answer the question of whether the duty to negotiate in good faith under contract law with respect to the license negotiation is different—that is, narrower or broader—than the contractual duty of good-faith negotiation that is presumed to exist under the FRAND contract.

[27] *See* J. Gregory Sidak, *Enhanced Damages for Infringement of Standard-Essential Patents*, 1 Criterion J. on Innovation 1101 (2016).

[28] *See, e.g.*, *Frey*, 941 F.2d at 594 (Posner, J.) ("The form of sharp dealing that we are discussing might or might not be actionable as fraud or deceit. That is a question of tort law and there the rule is that if the information is readily available to both parties the failure of one to disclose it to the other, even if done in the knowledge that the other party is acting on mistaken premises, is not actionable.").

[29] Furthermore, to the extent that a court were to find ETSI's FRAND commitment *not* to be contractual, there is reason to doubt that the SEP holder's promise could have binding effect under French contract law, which does not recognize promissory estoppel as an available claim. In 2019, Yves-Marie Laithier, a professor of French contract law at the Université Paris 1 Panthéon-Sorbonne, testified in a pretrial hearing in *u-blox v. InterDigital* that "[t]he doctrine of promissory estoppel is unknown in French contract law. It is indeed untranslatable in French." Declaration of Prof. Yves-Marie Laithier in Support of Motion to Dismiss at 2, u-blox AG v. InterDigital Inc., No. 19-cv-00001-CAB-BLM (S.D. Cal. Feb. 25, 2019), ECF No. 50-5. That conclusion comports with the understanding that promissory estoppel "is peculiar to common law systems." *Id.* (quoting John Cartwright, Formation and Variation of Contracts § 10-01 (Sweet & Maxwell 2d ed. 2018)).

[30] That ambiguity is exemplified by the opposing expert reports of two French law scholars filed in late 2018 and early 2019 in one such case. *Compare* Expert Report of Dr. Philippe Stoffel-Munck ¶ 121, at 29, Koninklijke KPN N.V. v. Sierra Wireless, Inc., No. 17-090-LPS-CJB (D. Del. Nov. 20, 2018) ("[T]he Declarant must grant a license on FRAND terms and must negotiate in good faith irrespective of the outcome of their negotiations and, a fortiori, irrespective of the binding force that their future agreement will be given or not in retrospect. In any event, they must answer for any loss caused to the other party by any breach of their duty to grant a license on FRAND terms and to negotiate in good faith."), ECF No. 205-1, *and* Reply Expert Report of Dr. Philippe Stoffel-Munck ¶ 77, at 16, *Sierra Wireless*, No. 17-090-LPS-CJB (D. Del. Feb. 3, 2019) ("Where the negotiations form part of a binding agreement,

submit that the solution to overcoming that ambiguity lies in reframing the problem as one of efficient market design.

That such questions would arise in SEP disputes tells us that a rift exists between American contract law and French contract law on matters of contract formation, and that the existence of that divide, much less the depth of its economic significance, again, has eluded courts and scholars. American law, it would seem, differs from the law of much of the rest of the world, evidently even common law jurisdictions, with respect to the negotiation and formation of a contract. American law presents a regimented view of when offer, acceptance, and contract formation each occurs. A more European approach evidently envisions an elongated process permitting multiple rounds of offer and counteroffer. Yet, that European process lacks any explicit rule for determining whether a given offer or counteroffer is sufficiently sweetened, relative to the prior offer or counteroffer, to contribute materially to closing the bid-ask spread separating the parties. And that European process also lacks any explicit rule declaring when the negotiation must end because the parties have reached an impasse and therefore deserve to have it recognized as a matter of law that they have failed in their efforts to form a contract.

The quiddity of this characteristic, which materially differs in degree between American contract law and European contract law, I will call *expedition*. It neatly illustrates how Americans and citizens of other advanced nations sometimes understand quite differently a concept so foundational to legal or economic reasoning that it is commonly presumed to admit no dispute. Expedition is the impatient foot tapping of the marketplace. The enemy of indecision, dithering, sloth, torpor, and indolence, expedition despises dilatory guile and circumlocution. In the arena of commerce and all its works and days of hands, expedition is how one acts upon Seneca's admonition: "It is not that we have a short time to live, but that we waste a lot of it."[31]

Being expeditious in the licensing of SEPs increases economic welfare in both the short run and the long run. In the short run, expedition reduces ambiguity, facilitates contract formation, and reduces the need to resort to litigation (as well as the opportunity to use litigation for strategic reasons). In the long run, in the context of licensing SEPs, expedition hastens the

the duty of good faith becomes more demanding, as comes into play the duty to ***perform*** in good faith.") (emphasis in original), ECF No. 205-1, ***with*** Rebuttal Expert Report of Dr. Vernon Valentine Palmer ¶ 133, at 39–40, *Sierra Wireless*, No. 17-090-LPS-CJB (D. Del. Jan. 8, 2019) ("[T]o the extent any good faith obligation exists, it is simply one to avoid committing a clear abuse of the liberty to negotiate freely—an obligation that would not be understood to require that a debtor put aside its own interests in favor of another party."), ECF No. 205-1.

31 Seneca, On the Shortness of Life 1 (C.D.N. Costa trans., Penguin Books 1997) (49 A.D.).

creation of consumer surplus and producer surplus from the commercialization of products practicing a new voluntary standard.

The presence or absence of efficient activity rules and closing rules could spell the difference between an SSO's success or its failure and withering away. There has been an evident poverty of foresight in regard to designing the *end* of the process of licensing SEPs. In the absence of some other scapegoat coming forward, I will blame that deficiency of market design on the engineers for having failed to recognize the economic and legal significance of setting in place the mechanism necessary to ensure the expeditious completion of negotiations between an SEP holder and third-party beneficiaries of the SEP holder's FRAND contract. Although we can infer that the vast majority of bilateral negotiations for the licensing of SEPs produce successful commercial agreements, those that do not have cost billions of dollars in litigation over the past decade.

II. Activity Rules, Closing Rules, and "Best Practices" in Negotiations Over FRAND-Committed SEPs

I have previously argued that time is of the essence in the implementation of a standard—in particular because to waste time in the introduction of an entirely new generation of products featuring standard-dependent technological innovations is to harm the public interest by sacrificing consumer surplus irreparably.[32] To the extent that one can properly impute a duty (or covenant) to negotiate in good faith to an intended third-party beneficiary of ETSI's FRAND contract with a particular SEP holder, that duty reflects the understanding that a public interest inheres in the expeditious negotiation of SEP licenses. Whether the implementer's behavior after receiving a legitimately FRAND offer adheres to the standard of good faith will depend ultimately on how quickly the implementer seeks to close the bid-ask spread and converge on an agreement—which is to say, contract formation.[33] Following that interpretation to its logical conclusion, the point at which the implementer ceases to sweeten its counteroffer from one round of the negotiation to the next defines the point of impasse. Implicit in this rule is the understanding that the parties also must define how long a given round lasts during their negotiation. How long may a party take to sweeten its bid or ask? If the

[32] *See* J. Gregory Sidak, *What Makes FRAND Fair? The Just Price, Contract Formation, and the Division of Surplus from Voluntary Exchange*, 4 Criterion J. on Innovation 701, 725–27 (2019); Sidak, *The FRAND Contract*, *supra* note 5, at 13–14 & n.47 (citing J. Gregory Sidak, *Irreparable Harm from Patent Infringement*, 2 Criterion J. on Innovation 1 (2017); J. Gregory Sidak, *Is Harm Ever Irreparable?*, 2 Criterion J. on Innovation 7, 10 (2017) (Inaugural Address for the Ronald Coase Professorship in Law and Economics, Tilburg University, Tilburg, The Netherlands (Sept. 16, 2011)).

[33] *See* J. Gregory Sidak, *The Meaning of FRAND, Part II: Injunctions*, 11 J. Competition L. & Econ. 201, 218 (2015).

parties provide no answer of their own to this question, the default answer becomes "a commercially reasonable amount of time." But, rather than have a court rule what amount of time is commercially reasonable, the parties can create considerable value by agreeing on a framework that is both more precise and more expeditious than what is merely commercially reasonable.

The obvious analogy here is to the "activity charge" required of a bidder to maintain its right to keep bidding in the simultaneous multi-round ascending auction for 3G spectrum licenses in the United Kingdom. Economist Paul Klemperer of Oxford, who advised the U.K. government, explains:

> Our design entailed multiple rounds of simultaneous bids. In the first round, each bidder makes a bid on one license of its own choice. To remain in the auction, a bidder must be "active" in every subsequent round. An active bidder either currently holds the top bid on a particular license, or else raises the bid on a license of the bidder's choice by at least the minimum bid increment. A bidder who is inactive in any round is eliminated from the rest of the auction.[34]

As I observed at the opening of this article, governmental agencies around the world have promoted "best practices" in negotiations over FRAND-committed SEPs. The most useful thing left undone in such statements of best practices is to endorse the concept of an activity charge for good-faith FRAND licensing negotiations, and then to identify an unambiguous economic methodology for determining the minimum bid increment by which an implementer must sweeten its counteroffer to the SEP holder's legitimately FRAND offer for the implementer to be deemed still to be negotiating in good faith.

The next most useful thing left undone in statements of best practices for good-faith FRAND licensing negotiation is to identify an unambiguous economic methodology for determining when the negotiation has ended in failure. Again, it bears emphasis that this question is legally relevant only for FRAND obligations not controlled by American-style contract principles of offer and acceptance—which, I have explained above, inherently have the admirable (but evidently under-appreciated) quality of unambiguously defining a closing rule for a bilateral negotiation.[35] Evan Kwerel, a highly respected economist who spent a career at the Federal Communications Commission and made important contributions to the design and execution of American spectrum auctions there, explained that "[t]he closing rule was one of the major [market] design issues for a simultaneous auction" for spectrum in the

[34] Klemperer, Auctions: Theory and Practice, *supra* note 4, at 181–82; *see also* Milgrom, Putting Auction Theory to Work, *supra* note 4, at 5–6, 14 (discussing the activity rule used in U.S. spectrum auctions in 1994).

[35] *See* Sidak, *The FRAND Contract*, *supra* note 5, at 15–19.

United States.[36] Stanford economics professors Robert Milgrom and Robert Wilson "proposed a simultaneous closing rule whereby the auction closes on all licenses only after a round has passed with no bidding on any license."[37] In contrast, conspicuously absent from the current conception of the FRAND licensing negotiation is any guidance on when it reaches its end in terms of rounds of offer and counteroffer. The negotiation is like a baseball game with an infinite number of innings, or a poker game in which a player may remain in the hand without calling his opponent's bet.

Because of the failure of SSOs or courts or others in positions of authority to impose both an activity rule and a closing rule, a contentious negotiation for a FRAND license, if not controlled by the law of a jurisdiction having American-style principles concerning contract formation, will regrettably resemble Zeno's Dichotomy paradox. The journey's end becomes ever closer in incrementally smaller half steps, but it is never reached.

III. An Economic Interpretation of Preparedness Under ETSI's FRAND Contract

Besides riding atop the general duty in French law to negotiate in good faith, ETSI's FRAND commitment has another peculiarity that distinguishes its activity rules and closing rules, such as they are, from those of other SSOs. In particular, a participant in ETSI's standardization process is required to declare whether it is "***prepared to grant*** irrevocable licences under its/their IPR(s) [intellectual property right(s)] on terms and conditions which are in accordance with Clause 6.1 of the ETSI IPR Policy . . . to the extent that the IPR(s) are or become, and remain ESSENTIAL to practice that/those STANDARD(S) or TECHNICAL SPECIFICATION(S)."[38] The ETSI IPR Policy appears in Annex 6 to the ETSI Rules of Procedure. Clause 6.1 of the IPR Policy provides:

> 6.1 When an ESSENTIAL IPR relating to a particular STANDARD or TECHNICAL SPECIFICATION is brought to the attention of ETSI, the Director-General of ETSI shall immediately request the owner to give within three months an irrevocable undertaking in writing that it is prepared to grant irrevocable licences on fair, reasonable and non-discriminatory ("FRAND") terms and conditions under such IPR to at least the following extent:

[36] Evan Kwerel, *Foreword*, *in* Milgrom, Putting Auction Theory to Work, *supra* note 4, at xvii.

[37] *Id.*; *see also* Milgrom, Putting Auction Theory to Work, *supra* note 4, at 267 ("The auction *closing rule* is especially important: the [simultaneous ascending] auction ends only after a round in which there are no new bids on any license.") (emphasis in original).

[38] ETSI IPR Policy, *supra* note 13, Appendix A, at 46 (emphasis added).

> MANUFACTURE, including the right to make or have made customized components and sub-systems to the licensee's own design for use in MANUFACTURE;
>
> sell, lease, or otherwise dispose of EQUIPMENT so MANUFACTURED;
>
> repair, use, or operate EQUIPMENT; and
>
> use METHODS.
>
> The above undertaking may be made subject to the condition that those who seek licences agree to reciprocate.[39]

In other words, ETSI requires the patent holder to be "prepared to grant" a license to its patents "on fair, reasonable and non-discriminatory terms and conditions"—that is, FRAND terms and conditions. ETSI's IPR Policy guidelines further note that "[s]pecific licensing terms and negotiations are commercial issues between the companies, and . . . shall not be addressed within ETSI."[40]

As of November 2019, to my knowledge, only one court or administrative opinion has attempted to interpret the phrase "prepared to grant" found in ETSI's FRAND obligation (and in the RAND obligation of the International Telecommunication Union (ITU)). In 2013, Administrative Law Judge David P. Shaw of the ITC, presiding over Investigation No. 337-TA-800, in which InterDigital sought to exclude from importation into the United States certain products manufactured by three respondents (Nokia, Huawei, and ZTE) that allegedly infringed InterDigital's SEPs, found:

> The licensing undertakings on which Respondents rely for their FRAND defenses state that InterDigital is "prepared to grant" licenses to Essential patents on FRAND terms and conditions. As stated in the ITU policy, this means that the patent owner is "willing to negotiate" licenses for the use of Essential patents. This commitment means that the IPR [intellectual property right] owner must negotiate towards licenses on FRAND terms, making genuine and good faith efforts to reach agreement. By so doing, the IPR owner fulfills its FRAND obligation.[41]

Given that lacuna concerning the duty of preparedness, I propose here an economic interpretation of the SEP holder's obligations. As will become clear shortly, that interpretation relates to the SEP holder's duties in negotiating

[39] *Id.* § 6.1.

[40] ETSI, ETSI Guide on IPRs § 4.1 (Oct. 8, 2018), https://portal.etsi.org/directives/39_directives_oct_2018.pdf.

[41] Certain Wireless Devices with 3G Capabilities and Components Thereof, Inv. No. 337-TA-800, slip op. at 421 (USITC June 28, 2013) (Initial Determination—Public Version) (Shaw, ALJ) (citations omitted).

a license agreement *with a given implementer*. Mine is one reasonable interpretation of the ETSI-imposed duty to be "prepared to grant" a license to SEPs on FRAND terms. Perhaps my interpretation will prompt others to propose alternatives, such that a court will eventually rule which interpretation among several is most reasonable.

ETSI's requirement that an SEP holder be "prepared to grant" a license refers to the SEP holder's preparedness to offer a license on FRAND terms and conditions to an implementer of the standard. From an economic perspective, an SEP holder that makes a legitimately FRAND offer that is capable of acceptance has conclusively demonstrated that it is prepared to grant a license to its SEPs on FRAND terms. As a matter of American contract law, the SEP holder's offer needs to be sufficiently specific to permit an implementer to accept the offer and to enter into a binding license agreement.[42]

At least one scholar of French law who routinely testifies on the meaning of ETSI's FRAND contract, Professor Philippe Stoffel-Munck of the Université Paris 1 Panthéon-Sorbonne, opined in the 1138 Investigation at the ITC that "prepared to grant" means "must grant," such that the SEP holder must "actually grant a FRAND license":

> Q [by Counsel for INVT SPE LLC, the SEP holder and complainant]. And you interpreted prepared to grant [in clause 6.1 of the ETSI IPR Policy] to mean must grant, correct?
>
> A. Yes, correct. . . .
>
> Q. Okay. You also interpreted prepared to grant to mean to actually grant a FRAND license; is that correct?
>
> A. That is.
>
> Q. And in your report you wrote that contract interpretation may only proceed where the black letter of the contract is obscure or ambiguous; is that correct?
>
> A. That is correct.[43]

42 *See* Restatement (Second) of Contracts § 24 (Am. Law Inst. 1981) (defining an offer as "the manifestation of willingness to enter into a bargain, so made as to justify another person in understanding that his assent to that bargain is invited and will conclude it"); *see also* Realtek Semiconductor Corp. v. LSI Corp., 946 F. Supp. 2d 998, 1007 (N.D. Cal. 2013) (Whyte, J.) (finding that an SEP holder that had merely contacted an implementer and shown its willingness to negotiate had not made a RAND offer, and that the SEP holder therefore had not discharged its duty under its RAND contract with the SSO in question, the IEEE).

43 Open Sessions Volume VII at 2330:18–2331:7, Certain LTE- and 3G-Compliant Cellular Communications Devices, Inv. No. 337-TA-1138 (USITC Sept. 20, 2019) (McNamara, ALJ) (Testimony of Philippe Stoffel-Munck).

Professor Stoffel-Munck further testified:

> Q. So now under the objective test, what would a French—how would the French court interpret prepared to grant in section 6.1 [of the ETSI IPR Policy]?
>
> A. I think that, if you apply the rules of interpretation, the objective ones, you come to the conclusion that the best way to understand that language is to look at what ETSI actually wrote. And that leads you to the conclusion that prepared to grant means prepared to grant licenses and to actually grant them.[44]

The opposing expert on French contract law in the 1138 Investigation, Professor Bertrand Fages, also of the Université Paris 1 Panthéon-Sorbonne, disagreed:

> Q [by Counsel for INVT SPE LLC, the SEP holder and complainant]. How are the objectives of the ETSI IPR Policy achieved?
>
> A. They are achieved through the availability of patents in clause 6.1. In clause 6.1 an IPR holder commits that it is prepared to grant . . . irrevocable licenses on FRAND terms and conditions.
>
> Q. Okay. Let's take a closer look at clause 6.1, which is on the screen in front of you. What does "prepared to grant" in clause 6.1 of the IPR Policy mean under French law?
>
> A. Well, prepared to grant plainly means something less than to definitely perform the action in question. It describes a readiness to grant rather than the definitive action of granting.
>
> Q. Is the prepared to grant language in clause 6.1 an indication of the policy drafter's intention to not impose an obligation to grant?
>
> A. Yes, it is, because the drafters specifically used this "prepared to grant" language. If they had meant to make the license to grant compulsory, then they would have said obligated to grant or must grant.
>
> Q. Does ETSI have a form FRAND license with predetermined terms and conditions that it expects IPR owners to enter into with implementers?
>
> A. No, it hasn't.
>
> Q. Under French law does "prepared to grant" under clause 6.1 mean that the implementer or potential licensee alone gets to set the terms and conditions of the FRAND license?
>
> A. No, ETSI expects bilateral negotiations between the IPR holder and the implementers.

[44] *Id.* at 2320:9–19.

> Q. Is your understanding of what prepared to grant means under clause 6.1 consistent with the policy's objective of seeking a balance between the needs of standardizations and the rights of IPR owners?
>
> A. Yes, very consistent, because the objective of the IPR Policy is not that the IPR holder give up the rights by entering, by force, into license agreements with controlled terms and conditions that have no power to negotiate nor to agree.
>
> Q. Does being prepared to grant FRAND licenses mean waiving any legal right to assert one's standard-essential patents if there is not an executed license?
>
> A. No, it doesn't. Without an executed license, the users have to obtain permission for using the IPRs, and they leave themselves exposed, if they don't have this permission to potential infringement actions.[45]

To my knowledge, no court or administrative agency has accepted Professor Stoffel-Munck's interpolated reading of ETSI's IPR Policy that "prepared to grant" means "must grant."[46] Indeed, the SEP holder might be able to show

[45] Open Sessions Volume IV at 1098:6–1100:13, Certain LTE- and 3G-Compliant Cellular Communications Devices, Inv. No. 337-TA-1138 (USITC Sept. 17, 2019) (McNamara, ALJ) (Testimony of Bertrand Fages). I have elsewhere explained that the SEP holder cannot ensure that a license will eventuate with each prospective implementer. *See* Sidak, *The FRAND Contract*, *supra* note 5, at 7.

[46] Experts have also opined on whether, from the perspective of the subjective intent of the drafters of the ETSI IPR policy and the objective interpretation of that policy under French law, SEP holders who are bound by the ETSI FRAND contract are obligated to be prepared to grant a license on FRAND terms to component suppliers. *See, e.g.*, Expert Report of Dr. Bertram Huber (Public Version) at 36, FTC v. Qualcomm Inc., No. 5:17-cv-00220-LHK (N.D. Cal. June 8, 2018) ("[I]t is important to recognize that Clause 6.1 [of the ETSI IPR Policy] defines a minimum scope of the license that an essential IPR holder is prepared to grant ('*to at least the following extent*'). What does this mean? It means that while the holder of standard essential patents may grant licenses with a scope wider than the defined minimum scope, it is not *required* or *obligated* to do so. Thus the text of Clause 6.1 of the ETSI IPR Policy limits the obligation to grant licenses. The omission of '*components*' (other than '*customized components*') from the scope of the minimum licensing requirement in Clause 6.1 is consistent with the prevailing industry practice in 1994 and still today, where licenses are almost always negotiated and executed between essential patent holders and end-user device manufacturers. This is further evidence that licenses to companies that merely intend to supply modem chips are not required by the ETSI IPR Policy.") (emphasis in original); Expert Report of Bénédicte Fauvarque-Cosson (Public Version) at 2, FTC. v. Qualcomm Inc., No. 5:17-cv-00220-LHK (N.D. Cal. June 28, 2018) ("Applying the principles of French contract law to the terms of the ETSI IPR Policy leads me to conclude that a FRAND commitment does not impose an obligation on SEP holders to offer FRAND licenses at the component level."); *id.* at 11 ("I believe that a French court would find that the clear and unambiguous terms of the ETSI IPR Policy require a conclusion that a FRAND licensing obligation under the ETSI IPR Policy is limited to an obligation to be prepared to grant SEP licenses to makers of complete, operational devices, such as cellular handsets or tablets."); *id.* at 12 ("But if the language of the ETSI IPR Policy were nevertheless found to be ambiguous, then a French court would consider ETSI's IPR Committee's negotiation history and considerations at the adoption of the IPR Policy and at subsequent points as providing evidence of the intention behind the ETSI IPR Policy and of the understanding of that Policy by industry participants, including the companies that make FRAND commitments. A French court would consider the history of the debate among the members of ETSI that led to the adoption of the ETSI IPR Policy, the history of the debate among the members of ETSI concerning subsequent proposed changes to the Policy, as well as decisions by ETSI following the adoption of the IPR Policy to incorporate SEP holders' technology into standards when aware of their licensing practices. A French court would also give significant weight to Dr. Huber's testimony that he and other drafters of the ETSI IPR Policy never considered or intended that a FRAND commitment

its preparedness to grant a license to its SEPs on FRAND terms and conditions even *before* it makes an offer to the implementer in question.[47]

For example, if a nondisclosure agreement (NDA) is a prerequisite to the SEP holder's making an offer, and if the implementer refuses to execute the NDA, then the SEP holder nonetheless might be capable of demonstrating its preparedness to grant a license, even though the negotiations did not progress to the point of the SEP holder's making of an offer. Such an interpretation makes sense. Otherwise, an implementer could repeatedly refuse to sign an NDA so as to prevent the SEP holder from demonstrating its preparedness to grant a license—which, at least under American contract principles, would then justify the SEP holder in saying that it had performed its duty under ETSI's FRAND contract, such that the implementer had no remaining right as a third-party beneficiary of the FRAND contract.

Preparedness might also connote readiness, as a procedural matter, on the part of the SEP holder to offer to license, if and when the need arises. The *Oxford English Dictionary* (*OED*) tells us that the verb "prepare" means, among other things, "to bring into a suitable condition for some future action or purpose; to make ready in advance; to fit out, equip," as well as "to be in a state of readiness, to be ready . . . ; to be in a condition or position *to* do something."[48] The *OED* traces the etymology of "prepare" to the Latin verb

would require licensing of component makers. A French court would likely find that ETSI's practice of continuing over several decades to incorporate into its standards the technology of SEP holders who had consistently only licensed at the device level demonstrates a clear intention on the part of ETSI that its IPR Policy does not require licensing only at the component level.") (footnotes omitted); *id.* at 12–13 ("I understand from my discussion with Bertram Huber that there is an established practice of negotiating SEP licenses for complete cellular devices. A French judge would consider this practice to constitute usages or practices that provide insight into the FRAND commitment. The fact that the longstanding practice of licensing only at the device level has been used since the mobile communications industry started is strong evidence of the intention on the part of the ETSI IPR Committee at the time of the Policy's drafting to impose the ETSI FRAND commitment only at the device, rather than at the component, level. Moreover, the evidence that royalty-bearing licenses to large patent portfolios in the cellular industry have continued, most commonly, to be granted only to makers of complete devices (not to makers of separate components) would be considered by the French courts to be strong evidence that the practice of licensing exclusively to device makers for complete devices is FRAND within the meaning of the ETSI policy, since it is based upon the commercial practices and the usages in the industry and the IPR Committee has not redrafted the Policy to require any other level of FRAND licensing.") (footnotes omitted). Bénédicte Fauvarque-Cosson has served as a Judge for the Conseil d'État (Council of State) of France since October 2018. *Bénédicte Fauvarque-Cosson*, Academia Europaea, https://www.ae-info.org/ae/Member/Fauvarque-Cosson_B%C3%A9n%C3%A9dicte.

47 I have argued that, in *TCL v. Ericsson*, Judge Selna regrettably neglected an important opportunity to reduce the ambiguity concerning the SEP holder's and the implementer's respective legal obligations and rights when negotiating over the licensing of SEPs. Sidak, *Judge Selna's Errors in* TCL v. Ericsson *Concerning Apportionment, Nondiscrimination, and Royalties Under the FRAND Contract*, *supra* note 2, at 109. I explained that, as a practical matter, an SEP holder that wishes to demonstrate unequivocally that it is "prepared to grant" a license must offer a license on FRAND terms to an implementer of the standard. *See id.* (quoting ETSI IPR Policy, *supra* note 13, § 6.1, at 38). Nevertheless, the SEP holder might be able to demonstrate its preparedness to grant a license to its SEPs on FRAND terms even *before* it makes an offer to the implementer in question.

48 *Prepare*, Oxford English Dictionary (2d ed. 1989) (emphasis added).

praeparare, meaning "to provide beforehand, to make ready beforehand."[49] Thus, "preparedness" is synonymous with "readiness."[50]

The economic motivation for interpreting "preparedness" as a state of procedural readiness is to impose a duty on the SEP holder to make an upfront investment of time and resources before an implementer urgently needs to procure a license, such that the SEP holder would need to hold open capacity to be used on short notice, akin to a retailer holding inventory in the stock room, or a pipeline selling a shipper of natural gas the option to hold capacity on the pipeline for possible future use. For example, an SEP holder that invests in the creation of a licensing program—including its employment of patent-licensing professionals; the promulgation of its list of patents available for license; its specification of its standard prices, terms, and conditions for licensing its SEPs; its economic justification for why those prices, terms, and conditions are fair, reasonable, and nondiscriminatory—might demonstrate the SEP holder's preparedness to grant a license to its SEPs. In particular, it is typical for a patent pool to disclose publicly its tariffs, its specimen licensing agreements, and its patent lists for anyone to inspect.[51] It is also typical for the holder of a large portfolio of SEPs to offer nonnegotiable licenses at standard royalty rates, sometimes called "reference rates,"[52] which in effect become the starting point for implementers that wish to negotiate a (lower) royalty rate pursuant to a bilateral agreement.

Of course, simply because some SEP holders might choose to prepare in this manner to grant licenses to their SEPs does not imply that all SEP holders must do the same—much less that the SEP holders that do prepare in this manner have been compelled to do so by some imperative contained in ETSI's IPR Policy. Some SEP holders, particularly small businesses, might not expect to generate enough licensing revenue to justify incurring the cost of having a licensing program. For them, hiring licensing professionals and flying them around the world to meet with prospective licensees might

[49] *Id.*

[50] *Preparedness*, Oxford English Dictionary (2d ed. 1989).

[51] *See, e.g.*, *Patent Finder*, Intellectual Ventures, http://patents.intven.com/finder; *HEVC*, MPEG LA, https://www.mpegla.com/programs/hevc/license-agreement/; *Licensing Information*, Saint Lawrence Communications, http://web.saintlawrencegmbh.com/licensing.html; *License Terms*, 3G Licensing S.A., http://www.3g-licensing.com/3g-joint-licensing-program/license-terms; *Pricing*, Avanci, http://avanci.com/pricing/.

[52] *See, e.g.*, Order DENYING Defendants' Motion to Supplement FRAND Contentions, or in the Alternative, Motion to Strike Reliance on Events Occurring After Service of Ericsson's FRAND Contentions at 3, TCL Commc'n Tech. Holdings, Ltd. v. Telefonaktiebolaget LM Ericsson, No. SACV 14-341 JVS (C.D. Cal. May 24, 2016) ("In March 2016, Ericsson conducted another annual internal review of its licensing rates for its 2G, 3G, and 4G standard essential patents. After the review, Ericsson decided to transition its reference rate system from a percentage running royalty rate system to a fixed-fee-per-unit rate system. Unlike a percentage running royalty rate system (in which licensees must pay some percentage of the sales price for each device sold), the fixed-fee-per-unit rate system requires licensors to pay fixed fees for each device sold."); *see also, e.g.*, Press Release, Nokia, Nokia Licensing Rate Expectations for 5G/NR Mobile Phones (Aug. 21, 2018), https://www.nokia.com/about-us/news/releases/2018/08/21/nokia-licensing-rate-expectations-for-5gnr-mobile-phones/.

be prohibitively costly relative to the expected royalty revenue. In such circumstances, the SEP holder's choice not to establish a higher degree of preparedness to grant a license ought not to indicate that the SEP holder is unprepared to grant a license to its SEPs. And of course if one carries this observation to its logical conclusion, for some particularly low-valued implementations of one's SEPs in IoT applications (such as inexpensive sensor devices, for example), it might be rational for the SEP holder to forgo entirely any attempt to enforce its SEPs by locating the implementers in question and asking them to take licenses.

When economic analysis is undertaken specifically for the purpose of assisting a court's resolution of a consequential legal dispute—as in the case where a law firm submits expert economic testimony as evidence in commercial litigation—it is important that the expert witness proffering that analysis exhibit an understanding of the applicable legal principles relevant to resolving that dispute. The expert economic witness must invest the time to discern, at a novice's level of sophistication at least, the applicable legal principles, so that the expert witness can frame his economic opinions in a manner that is relevant in an evidentiary sense to the question that the finder of fact must decide[53]—as well as being not prejudicial, confusing, or misleading.[54] If the expert economic witness lacks an awareness of the applicable legal principles, it is incumbent upon the retaining law firm to instruct the witness on such principles. Of course, notwithstanding the substantive methodology being applied, expert economic testimony that is based on a false understanding of the operative language of the relevant FRAND commitment might be deemed inadmissible for the independent reason that it is not based on the specific facts of the case.[55]

Non-economist and non-lawyer expert witnesses who comment on the standards-development process can be particularly susceptible to these fallacious arguments. For example, Professor Rudi Bekkers of the Eindhoven University of Technology in The Netherlands, testified as follows in September 2019 at the ITC in the 1138 Investigation, on behalf of the respondents, Apple, HTC, and ZTE:

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[53] *See* Fed. R. Evid. 402 ("Irrelevant evidence is not admissible."); Fed. R. Evid. 401 ("Evidence is relevant if: (a) it has any tendency to make a fact more or less probable than it would be without the evidence; and (b) the fact is of consequence in determining the action.").

[54] *See* Fed. R. Evid. 403 ("The court may exclude relevant evidence if its probative value is substantially outweighed by a danger of one or more of the following: unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, or needlessly presenting cumulative evidence.").

[55] *See* Fed. R. Evid. 702 ("A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.").

Q [by Counsel for INVT SPE LLC, the SEP holder and complainant]. And, Professor Bekkers, you're not a lawyer, right?

A. I'm not a lawyer.

Q. And you're not an expert in French law?

A. I'm not an expert in French law.

Q. And you were not in the room when the terms of the IPR policy were drafted, right?

A. That is correct.

Q. And, in fact, you never attended ETSI IPR policy meeting [sic], right?

A. Maybe you could explain what you mean by ETSI IPR policy meeting.

Q. A meeting by which the IPR policy was drafted and discussed.

A. I was not present at the meetings where it was drafted. I was present at later meetings where the IPR policy was discussed at least being the IPR special committee as it exists right now.

Q. And that was after 2016?

A. That is correct.

Q. And you never attended any ETSI technical committee meetings?

A. No, I did not.

Q. And you're not relying on or interpreting case law today for your opinion, right?

A. No, I'm not.

Q. And you only joined ETSI in the second half of 2015, right?

A. Yeah, the company that I established that I mentioned very shortly in the beginning [of my testimony] joined ETSI, I believe, in the year 2016.

Q. And you joined because you wanted to have access to the documents, the ETSI documents? Sorry, Professor Bekkers, go ahead.

A. Yeah, having access to the documents was one of the reasons that I—my company joined ETSI.

Q. And you have never been involved in . . . licensing negotiations for a standard-essential patent, correct?

A. That is correct.

Q. And you're not an expert in antitrust law?

A. No, I'm not an expert in antitrust law.

Q. You're not an expert in European competition law?

> A. I am not.
>
> Q. Your Honor, the basis of INVT's [the complainant's] objection is that since Professor Bekkers was not in the room or in ETSI when the policy was drafted, he has to only rely on ETSI documents and written documents of stakeholders as he testified to and he has no specialized knowledge to add to just what is on the face of these documents. He also reviewed much—in one of his slides reviewed U.S. and European policymakers [and] FTC European competition law where they are using a governing body in Europe on competition law to interpret the ETSI IPR policy, even though the ETSI IPR policy states that the policy is governed by French law. He admits he's not a lawyer, he's not an antitrust lawyer, and he's not relying or interpreting case law. If anything, he presents more as an ETSI commentator rather than—I believe the Respondents are or Apple and HTC are offering him as an expert in SEP policy in mobile communications. That is the basis of INVT's objection, Your Honor.
>
> JUDGE McNAMARA: I understand. And I'll take that into consideration when I consider the weight of the evidence.[56]

Even if such testimony is deemed to be admissible in an administrative proceeding in the United States, it surely deserves little evidentiary weight for the reason that the cross examiner's questions imply.

The precise scope of both an SEP holder's obligations and the rights granted to third-party beneficiaries by virtue of ETSI's FRAND contract depend on (1) that contract's actual language and (2) the controlling law governing the contract's interpretation (if needed), which for ETSI is French contract law.[57] Together, those two elements determine the meaning of the SEP holder's contract with ETSI and its application to the facts of a given case.

To my knowledge, expert economic witnesses in FRAND licensing disputes have never disclosed opinions on the economic meaning of the phrase "prepared to grant" in ETSI's FRAND contract. Consequently, these expert witnesses (and the judges and lawyers hearing their testimony) fail to distinguish the unique language of ETSI's FRAND commitment from the FRAND or RAND commitments required by other SSOs. Thus, it is quite conceivable that, at least in the FRAND cases that have been litigated to date in the U.S. federal courts, much of the testimony that economists and other expert witnesses have given on whether or not a given SEP holder has discharged its FRAND duties to ETSI should have been excluded from evidence in a ruling on a motion *in limine* on the grounds that such testimony,

[56] Open Sessions Volume VII at 2240:14–2243:15, Certain LTE- and 3G-Compliant Cellular Communications Devices, Inv. No. 337-TA-1138 (USITC Sept. 20, 2019) (McNamara, ALJ) (Testimony of Rudi Bekkers).

[57] ETSI IPR Policy, *supra* note 13, § 12, at 44.

if permitted at trial, would be predicated on the witness's false understanding—or lack of any understanding at all—of the operative contractual text, such that the resulting opinions so predicated would necessarily be both legally irrelevant and unhelpful to the finder of fact.

Conclusion

This article has two messages. First, any set of principles for defining whether a FRAND licensing negotiation has transpired in good faith must identify what economists who work on questions of market design call activity rules and closing rules. Judges, practicing lawyers, legal scholars, and government officials working on the defining of principles for good-faith negotiation of FRAND licenses for SEPs have not recognized that need. Nor, to my knowledge, has any academic economist or expert economic witness commented on this lacuna.

Second, the American jurisprudence on offer, acceptance, and contract formation fortuitously has the clarity of an unambiguous closing rule, but the contract jurisprudence of other nations appears, at least to my American eyes, to be less clear. In my experience, the potential for there to be material variation across jurisdictions in the level of ambiguity of the legal principles for determining whether an SEP holder and an implementer have conducted their FRAND licensing negotiation in good faith has received virtually no attention from judges, practicing lawyers, legal scholars, and government officials. And, to my knowledge, this issue has received absolutely no consideration from academic economists or expert economic witnesses testifying in FRAND disputes.

This phenomenon of differential ambiguity in matters of contract formation and good-faith negotiation has important practical implications because French law, which appears to be less emphatic than American law on such questions, often is the controlling law for interpreting the duties imposed by a FRAND contract because ETSI is so prominent in the setting of voluntary standards for wireless communication, and ETSI's FRAND contract prescribes that French law controls. In contrast, New York law controls the IEEE's RAND contract. Those legal differences in turn could influence the content and evidentiary relevance of expert testimony on questions of economic fact, such as the quantification of a FRAND or RAND royalty.

To begin the task of reducing legal and economic ambiguity concerning the determination of whether an SEP holder and an implementer have conducted a FRAND licensing negotiation in good faith, I have proposed here the formulation of a specific activity rule and a specific closing rule when American contract jurisprudence does *not* control interpretation of the FRAND contract in question. My proposed activity rule is that, in each round of offer and counteroffer—and to the extent that the SEP holder has not already discharged its contractual obligation to ETSI (such as by already having made a legitimately FRAND offer at the very outset of the negotiation)—a party must revise its bid or ask price by the minimum agreed-upon increment for that party to be deemed still to be negotiating in good faith. My proposed closing rule is that a party will be deemed to have made its final offer or counteroffer if it does not, within a commercially reasonable amount of time after receiving an offer or counteroffer, sweeten its price relative to its price in the previous round of offer and counteroffer. These rules of market design are proposals, which will surely benefit from scrutiny and refinement by others, but these proposals should suffice to invite a needed discussion.

Finally, because ETSI's FRAND contract contains the distinctive (but evidently ambiguous) requirement that an SEP holder be "prepared to grant" licenses to its SEPs, I offer here one particular interpretation of that phrase that is explicitly informed by the economic analysis of law. Whether a court would find my suggested interpretation compatible with the principles of interpretation used in French contract law is a question I must leave to others better suited to the task.